Applicant: Ulf Mattsson et al. Attorney's Docket No.: 17299-006001

Serial No.: 09/721,942

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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A method for encrypting characters from a data element in a relational database, the method comprising:

reading a data type of a first data element, said first data element including a first character string;

interpreting said data type to form a restricting character set; and
encrypting [each character of said first data element] said first character string into [an
encrypted character] a second character string, each character in said second character string
being selected from said restricting character set, said first character string uniquely
corresponding to said second character string.

- 2. (previously presented) A method according to claim 1, comprising the further step of: arranging one or more character sets in a pattern for a data type.
- 3. (currently amended) A method according to claim 1 or 2, where<u>in the number of characters in the second character string is equal to the number of characters in the first character string [the encryption results in a data element having the same number of characters as the unencrypted data element].</u>
 - 4. (currently amended) A method according to claim 1, comprising the further steps of: converting each character of said first character string to an index value; and adding a varying value to each index value before encryption.
- 5. (currently amended) A method according to claim 4, wherein the varying value is obtained by the steps of:

creating an initial value by hashing [the] an encryption key;

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adding adjacent index values pairwise from the left to the right using said initial value when adding the leftmost character.

6. (previously presented) A method according to claim 1, wherein the encryption is performed using the DES algorithm in cipher mode.

7. (currently amended) A system for encrypting characters from a data element in a relational database, the system comprising:

reading means for reading a data type of a first data element, said first data element including a first character string;

interpretation means for interpreting said data type to form a restricting character set; and encryption means for encrypting said first character string [each character of said first data element] into [an encrypted character] a second character string, each character in said second character string being selected from said restricting character set, said first character string uniquely corresponding to said second character string.

- 8. (currently amended) A method according to claim 1, further comprising: storing said [encrypted characters] second character string in a second data element in said relational database.
- 9. (previously presented) A method according to claim 8, wherein said first data element and said second data element are the same data element.
- 10. (currently amended) A system according to claim 7, further comprising: storing means for storing said [encrypted characters] second character string in a second data element in said relational database.
- 11. (previously presented) A system according to claim 10, wherein said first data element and said second data element are the same data element.